

**PE/Cy7 anti-human CD318 (CDCP1)**

**Catalog # / Size:** 2220080 / 100 tests  
2220075 / 25 tests

**Clone:** CUB1

**Isotype:** Mouse IgG2b, κ

**Immunogen:** NIH-3T3 cells transfected with human CDCP1

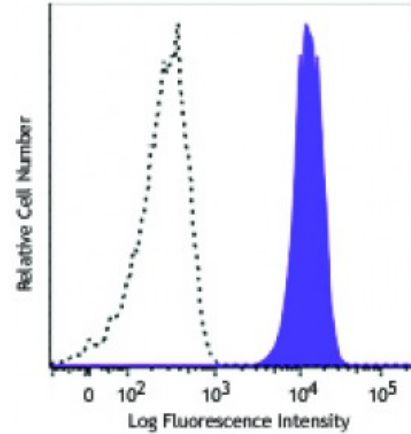
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Workshop Number:** HLDA8

**Concentration:** Lot-specific



HT-29 cells (human colon carcinoma) were stained with PE/Cy7 anti-human CD318 (clone CUB1) (filled histogram) or PE/Cy7 mouse IgG2b, κ isotype control (open histogram).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application References:** 1. Bühring HJ, *et al.* 2004. *Stem Cells* 22:334-343.  
2. Iwata M, *et al.* 2014. *PLoS One.* 9:103904. [PubMed](#)

**Description:** The CUB1 antibody recognizes CD318 also known as CDCP1, CUB domain containing protein 1, and SIMA135. CD318 is a transmembrane protein containing three CUB domains with a predicted molecular weight of approximately 93 kD. Alternately spliced isoforms have also been reported. CD318 is a marker for immature hematopoietic progenitor cell subsets and is also expressed in mesenchymal stem cells and neural progenitor cell populations. This marker is also widely distributed in a variety of cell types including keratinocytes, skeletal muscle, colon, kidney, lung, small intestine. CD318 is overexpressed in colon and lung tumors and expression level has been shown to correlate with metastatic ability of carcinomas. CD318 interacts with plasminogen, matriptase, and c-Src (phosphorylates residue Y734). The function of CD318 is not well understood although it is thought to be involved in early hematopoiesis. The CUB1 antibody has been shown to be useful for flow cytometry.

**Antigen References:** 1. Brown TA, *et al.* 2004. *J. Biol. Chem.* 279:14772.  
2. Conze T, *et al.* 2003. *Ann. N.Y. Acad. Sci.* 996:222.  
3. Hooper JD, *et al.* 2003. *Oncogene* 22:1783.